

# EXHIBIT H

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

**TQ DELTA, LLC,**

**Plaintiff,**

V.

**COMMScope Holding Company, Inc., Commscope Inc., Arris International Limited, Arris Global Ltd., Arris US Holdings, Inc., Arris Solutions, Inc., Arris Technology, Inc., and Arris Enterprises, LLC,**

**NOKIA CORP., NOKIA SOLUTIONS  
AND NETWORKS OY, and NOKIA OF  
AMERICA CORP.**

### Defendants.

## JURY TRIAL DEMANDED

**Civil Action 2:21-cv-310-JRG**  
**(Lead Case)**

**Civil Action No. 2:21-cv-309-JRG**  
**(Member Case)**

**PLAINTIFF TQ DELTA, LLC'S NOTICE OF SUBPOENA ON  
BROADCOM INCORPORATED**

PLEASE TAKE NOTICE THAT, pursuant to Rule 45 of the Federal Rules of Civil Procedure, Plaintiff TQ Delta, LLC (“Plaintiff” or “TQ Delta”) will serve the attached subpoena on Broadcom Incorporated. A copy of the subpoena to be served is attached hereto as Exhibit A.

Dated: March 10, 2022

Respectfully submitted,

By: /s/ Edward Chin

Edward Chin

Texas State Bar No. 50511688

echin@pacificfirm.com

William E. Davis, III  
Texas State Bar No. 24047416  
bdavis@davisfirm.com

Christian J. Hurt  
Texas State Bar No. 24059987  
churt@davisfirm.com

Rudolph “Rudy” Fink IV  
Texas State Bar No. 24082997  
rfink@davisfirm.com

**The Davis Firm PC**  
213 N. Fredonia Street, Suite 230  
Longview, Texas 75601  
Telephone: (903) 230-9090  
Facsimile: (903) 230-9661

**ATTORNEYS FOR PLAINTIFF  
TQ DELTA, LLC**

**Exhibit A**

The following definitions are incorporated into each request for production. You are directed to respond to each request for production as if the definitions were fully set forth therein.

1. The terms “Broadcom,” “You,” and “Your” shall mean and refer to Broadcom Inc., as well as its predecessors (including Broadcom Limited), successors, affiliates, parent companies, divisions, subsidiaries (including Broadcom Corporation., and Avago Technologies International Sales Pte. Ltd.), assignors, past or present officers, directors, employees, agents, partners, attorneys, accountants, advisors, counsel, representatives, and any other person or entity acting for or on its behalf.

2. The term “TQ Delta” shall mean and refer to TQ Delta, LLC and its directors, employees, agents, partners, attorneys, accountants, advisors, counsel, representatives, and any other person or entity acting for or on its behalf.

3. The term “CommScope” shall mean and refer to CommScope Holding Company, Inc., CommScope Inc., ARRIS International Limited, ARRIS Global Ltd., ARRIS US Holdings, Inc., ARRIS Solutions, Inc., ARRIS Technology, Inc., and ARRIS Enterprises, LLC, and its predecessors, successors, parent companies, divisions, subsidiaries, assignors, past or present officers, directors, employees, agents, partners, attorneys, accountants, advisors, counsel, representatives, and any other person or entity acting for or on its behalf.

4. The term “Nokia” shall mean and refer to Nokia of America Corp., Nokia Corp., and Nokia Solutions and Networks Oy, and its predecessors, successors, parent companies, divisions, subsidiaries, assignors, past or present officers, directors, employees, agents, partners, attorneys, accountants, advisors, counsel, representatives, and any other person or entity acting for or on its behalf.

5. The term “Broadcom-CommScope chip/chipset” shall mean any and all Broadcom DSL chip/chipsets (including without limitation those made and/or sold by Broadcom’s predecessors in interest, successors in interest, and/or subsidiaries and parent companies) that have been, since January 1, 2015, or are currently, used in CommScope products and/or provided to CommScope or another entity for manufacture or assembly into a CommScope product, including without limitation Broadcom chip/chipset model or part numbers – BCM3322, BCM3325, BCM4366E, BCM6318, BCM6358, BCM6362, BCM6410, BCM6411, BCM6421, BCM6511, BCM651017f, BCM63138, BCM63158, BCM63x68, BCM63178, BCM65246, BCM65300, BCM65414, BCM65400, BCM65450, BCM65500, BCM65550, BCM65X00 Family.

6. The term “Broadcom-Nokia chip/chipset” shall mean any and all Broadcom DSL chip/chipsets (including without limitation those made and/or sold by Broadcom’s predecessors in interest, successors in interest, and/or subsidiaries and parent companies) that have been, since January 1, 2015, or are currently, used in Nokia products and/or provided to Nokia or another entity for manufacture or assembly into a Nokia product, including without limitation Broadcom chip/chipset model or part numbers – BCM3322, BCM3325, BCM4366E, BCM6318, BCM6358, BCM6362, BCM6410, BCM6411, BCM6421, BCM6511, BCM651017f, BCM63138, BCM63158, BCM63x68, BCM63178, BCM65246, BCM65300, BCM65414, BCM65400, BCM65450, BCM65500, BCM65550, BCM65X00 Family.

7. The term “Document” and/or “Thing” shall have the broadest definition possible under Federal Rule of Civil Procedure 34 and Federal Rule of Evidence 1001, and shall include without limitation, any and all writings, communications, correspondence, emails, drawings, graphs, charts, recordings, photographs, and images. The foregoing specifically includes all forms of electronically stored information (“ESI”), whether in a computer database or otherwise,

regardless of whether such documents are presently in documentary form or not. A draft or non-identical copy is a separate document within the meaning of this term. As used herein, “thing” also means any tangible item(s), other than a “document” as defined herein, which constitute or contain matters within the scope of Federal Rule of Civil Procedure 26(b).

8. The term “Communication” means any conveyance of information from one or more persons to one or more other persons and includes, but is not limited to, oral, written, electronic, verbal, and nonverbal modes.

9. The term “Source Code” shall mean all source code for hardware, firmware, and/or software that is implemented in, executed on, and/or used to control a “Broadcom-CommScope chip/chipset” or “Broadcom-Nokia chip/chipset” including (a) hardware design and implementation code and all updates, including without limitation Verilog, VHDL, HDL, and RTL code; (b) firmware code and all updates, including without limitation DSL code, embedded processor or micro-processor code (e.g., ARM processor / micro-processor code), and micro-controller and special purpose hardware code; (c) software code and all updates; (d) software packages, executables, makefiles, build files, batch files and their equivalents, libraries, drivers, interfaces, and applications; (e) any directories or documents created and/or stored with source code in the ordinary course of business, including comments, notes, read-me files, development files, header files, build environment, RTL design documents, soft macros, hard macros, run-time libraries, management software, kernels, register set information, configuration files, and all other runtime files that allow or affect the creation or execution of such hardware, firmware, and/or software (f) release notes and change logs; and (g) development packages, executables, libraries, drivers, interfaces and applications for the hardware, firmware, and/or software codes.

10. “ADSL” means asymmetric digital subscriber line.

11. “DSL” means digital subscriber line.
12. “VDSL” means very-high-bit-rate digital subscriber line.
13. “VDSL2” means the DSL protocol defined by the ITU-T G.993.2 standard as well as any other standard that requires implementation of VDSL2 such as G.Vector.
14. “ADSL2” means the DSL protocol defined by the ITU-T G.992.3 standard.
15. “ADSL2+” means the DSL protocol defined by the ITU-T G.992.5 standard.
16. “G.inp” means the DSL protocol defined by the ITU-T G.998.4 standard.
17. “G.bond” means the DSL protocol defined by the ITU-T G.998.1 standard or the ITU-T G.998.2 standard.
18. “G.fast” means the DSL protocol defined by the ITU-T G.9701 standard.
19. The term “DSL Standards” shall mean the DSL standards defined in paragraphs 10-18 above.
20. “Electronically stored information” or “ESI” means any document that can be or has been stored in electronic form on a server, tape, electronic media such as an internal or external hard drive or any media whereby the document can be saved and be available for retrieval using any retrieval device, including a computer or server.
21. “Entity” or “Entities” includes natural persons, proprietorships, partnerships, firms, corporations, public corporations, municipal corporations, governments (including foreign national governments, the government of the U.S. or any state or local government), all departments and agencies thereof, any governmental agencies of any country, political subdivisions, groups, associations, or organization.
22. “Evidencing” means proving, indicating, or being probative of the existence or nature of the subject of the document requests.

23. The singular form of a noun or pronoun shall include the plural form of the noun or pronoun, and vice versa.

24. The past tense shall include the present tense and the present tense shall include the past tense as to make the request inclusive rather than exclusive.

25. “And” or “or” shall be both conjunctive and disjunctive.

26. The terms “any,” “each,” and “all” shall be considered to include “each and every.”

27. The term “including” shall be construed to mean “without any limitation.”

28. The terms “relating to” and “related to” are to be given their broadest possible meaning, including but not limited to: referring to, describing, evidencing, concerning, constituting, mentioning, containing, supporting, discussing, analyzing, pertaining to, being connected with, resulting from, reflecting upon, in whole or in part, directly or indirectly, the stated subject matter.

### **Instructions**

1. Produce each requested document in its entirety, including all attachments and enclosures. If a portion of a Document is responsive to a request, produce the entire document, including all attachments, enclosures, “post-it”-type notes, and any other matter physically attached to the document. If a document responsive to any requests cannot be produced in full, it shall be produced to the extent possible with an explanation stating why production of the remainder is not possible.

2. Produce Documents in the same order as they are kept in the ordinary course of business and, where attached, shall not be separated or disassembled. If Documents responsive to any request are normally kept in a file or folder, also produce that file or folder with any labels attached thereto, and indicate the company, division, department, and/or individual from whose



files the document is being produced. If responsive documents are segregated or separated from other documents, whether by inclusion in binders, files, sub-files, or by use of dividers, tabs or any other method, produce such documents in that form.

3. Electronically stored information must be produced in a reasonably usable format, together with all metadata for such production. If You contend that any documents or information is not reasonably accessible, identify the documents or information, their location, and state the basis for Your contention.

4. For any document, communication, or thing that You contend is privileged or otherwise shielded from discovery, state the basis for the privilege claimed, the name and address of the author(s) and addressee(s), the date, the type of document, the subject matter of the document, and the name and address of every recipient of the original or any copy of the document and such other information needed to enable TQ Delta to assess the claim.

## **DOCUMENTS TO BE PRODUCED**

### **DOCUMENT CATEGORY 1:**

All Documents and Source Code relating to any Broadcom-CommScope chip/chipset and Broadcom-Nokia chip/chipset that are or have been provided or made available to CommScope or Nokia, including without limitation such Documents that have been provided or made available through Broadcom websites, file sharing databases, and/or customer portals.

### **DOCUMENT CATEGORY 2:**

Documents sufficient to show all names, model numbers, part numbers, acronyms, codewords, codenames, aliases, or internal references used to identify or refer to each version of Broadcom-CommScope chip/chipset and Broadcom-Nokia chip/chipset.

### **DOCUMENT CATEGORY 3:**

For each version of Broadcom-CommScope chip/chipset and Broadcom-Nokia chip/chipset, all Documents that relate to, describe, and/or specify the DSL functionalities, including without limitation:

- (a) data sheets;
- (b) technical documents and/or specifications;
- (c) requirements documents and/or specifications;
- (d) functional descriptions and/or specifications;
- (e) hardware descriptions and/or specifications;
- (f) software descriptions and/or specifications;
- (g) firmware descriptions and/or specifications;

- (h) architecture descriptions and/or specifications;
- (i) board-level design documents and/or specifications for any Broadcom-CommScope chip/chipset and Broadcom-Nokia chip/chipset (e.g., documents showing all components (such as other semiconductor devices) placed on a board with one or more Broadcom-CommScope chips/chipsets and Broadcom-Nokia chip/chipset);
- (j) reference design documents and/or specifications for any Broadcom-CommScope chip/chipset and Broadcom-Nokia chip/chipset (e.g., designs showing implementation of all components necessary to enable implementation of DSL functionality);
- (k) functional and/or block diagrams;
- (l) instructions;
- (m) component lists and/or selection guides;
- (n) programmer's or software development guides;
- (o) technical reference manuals;
- (p) application notes; and
- (q) hardware, software, and firmware release notes.

**DOCUMENT CATEGORY 4:**

For each Broadcom-CommScope chip/chipset and Broadcom-Nokia chip/chipset, all Documents identifying, describing, discussing, or relating to whether such chip/chipset, or a product employing such chip/chipset, complies with or does not comply with, or implements or does not implement the DSL Standards or any portion, feature, or option thereof.

**DOCUMENT CATEGORY 5:**

For each Broadcom-CommScope chip/chipset and Broadcom-Nokia chip/chipset, all Documents describing, specifying, discussing, or relating to the following DSL features, functions, operations, components, or modules:

(a) specifying and allocating memory for interleaving and/or deinterleaving and the communication of related information, including, for example, features, functions, or operations relating to:

**ITU-T G.993.2** (12/2011, 01/2015, and 02/2019) at § 5.1 *VTU functional model*; § 6.2.8 *Aggregate interleaver and de-interleaver delay*; § 7.1 *Duplexing method and band plan construction*; § 9.4 *Interleaving*; § 10.4.3 *Modulation by the inverse discrete Fourier transform (IDFT)*; § 12.3.5 *Channel analysis and exchange phase*; Table 12-47 – *VTU-O signals and SOC messages in the channel analysis and exchange phase*; § 12.3.5.2.1.3 *O-PMS*; Figure 5-4 – *Generic application reference model for remote deployment with splitter*; Figure 6-1 – *Illustration of all latency paths composing the aggregate interleaver and deinterleaver delay specified in each profile*; and/or Table 12-56 – *Description of message O-PMS*.

(b) scrambling or pseudo-randomly rotating the phases of subcarriers, including, for example, features, functions, or operations relating to:

**ITU-T G.993.2** (12/2011, 01/2015, and 02/2019) at § 5.1 *VTU functional model*; § 10.4.3 *Modulation by the inverse discrete Fourier transform (IDFT)*; § 12.2 *Special operations channel (SOC)*; § 12.3.6.2 *Quadrant scrambler*; § 10.3.3.2.1 *Even values of b*; § 12.3.3.3.1 and § 12.3.3.3.2 *Signals transmitted by the VTU-R*; § 12.3.3.3.2.1 *R-P-MEDLEY*; § 12.3.3.3.1.2 *O-P-Channel discovery 1*; § 12.3.3.3.2.2 *R-P-Channel discovery 1*; § 12.3.4.3.1.8 *O-P Training 2*; § 12.3.4.3.2.8 *R-P-Training 2*; § 12.3.5.3.1.1 *O-P Medley*; § 12.3.5.3.2.1 *R-P Medley*; Figure 5-4; Figure 10-9;

Figure 12-12 – *Bit generator*; Table 12-37; Table 12-38; Table 12-44; Table 12-46; Table 12-66; Table 12-67; Table 12-68; Table 12-69; and/or Table 12-70 – *Pseudo-random transformation*.

(c) communicating and/or determining diagnostic information about a communication channel, including, for example, features, functions, or operations relating to:

**ITU-T G.992.3** (04/2009) at § 8.12.3 *Test parameters*; § 9.4.1.10 *Test parameter messages*; § 8.12.3 *Test parameters*; § 8.12.3.1 *Channel characteristics function per subcarrier (CCFps)*; § 8.12.3.2 *Quiet line noise PSD per subcarrier (QLNps)*; § 8.13.2.2.2 *MS messages*; § 8.13.4.1.1 *C-REVERBI*; § 8.13.4.2.1 *R-REVERBI*; § 8.15 *Loop diagnostics mode procedures*; § 8.15.1 *Overview*; § 8.15.5.1.1 *Channel information bearing messages*; § 8.15.5.2.1 *Channel information bearing messages*; Figure 5-4; Table 5-61; Table 8-21; Table 8-23; Table 8-36; Table 8-42; Table 8-51; Table 8-52; Table 8-61 and/or Table 8-62.

**ITU-T G.992.5** (01/2009) at § 8.12.3 *Test parameters*; § 9.4.1.10 *Test parameter messages*; § 8.12.3 *Test parameters*; § 8.12.3.1 *Channel characteristics function per subcarrier (CCFps)*; § 8.12.3.2 *Quiet line noise PSD per subcarrier (QLNps)*; § 8.13.2.2.2 *MS messages*; § 8.13.4.1.1 *C-REVERBI*; § 8.13.4.2.1 *R-REVERBI*; § 8.15 *Loop diagnostics mode procedures*; § 8.15.1 *Overview*; § 8.15.5.1.1 *Channel information bearing messages*; § 8.15.5.2.1 *Channel information bearing messages*; Table 5-61; Table 8-21; Table 8-23; Table 8-36; Table 8-42; Table 8-51; Table 8-52; Table 8-61 and/or Table 8-62.

**ITU-T G.993.2** (02/2006, 02/2019, and 12/2011) at § 10.4.3 *Modulation by the inverse discrete Fourier transform (IDFT)*; § 11.4.1.1.1, *Channel characteristics function per subcarrier group (CCF-ps)*; § 11.4.1.1.2 *Quiet line noise PSD per subcarrier group (QLN-ps)*; § 12.3 *Initialization procedure*; § 12.3 *Loop diagnostic mode procedure*; § 12.4.1 *Overview*; § 12.4.1.1 *SOC message mapping during loop diagnostic mode*; § 12.4.2.1.1 *VTU-O message O-PRM-LD*; §

12.4.2.1.2 *VTU-R message R-PRM-LD*; § 12.4.2.2 *Signals transmitted during the channel discovery and training phases*; Figure 5-4; Table 12-2; Table 12-6; Table 12-10, Table 12-12; Table 12-16; Table 12-23; Table 12-61; Table 12-62; Table 12-63; Table 12-71; Table 12-72; Table 12-74; and/or Table 12-75.

**ITU-T G.997.1** (6/2012) at § 7.3.1.1.8 *Loop diagnostic mode forced (LDSF)*, Table 12-7, Table 12-10, and/or Table 12-16.

(d) modifying forward error correction and interleaver parameter (FIP) settings during steady-state communication or initialization, including, for example, features, functions, or operations relating to:

**ITU-T G.993.2** (02/2019 and 12/2011) at § 3.64 *Syncflag*; § 9.1 *PMS-TC Functional Model*; § 9.1.1.3 *Control flow*; § 9.3 *Forward error correction*; § 9.4 *Interleaving*; § 9.4.1 *Dynamic change of interleaver depth*; § 10.5.3 *On-line reconfiguration*; § 12.3.5.2.1.3 *O-PMS*; § 12.3.5.2.2.3 *R-PMS*; § 13.2.1 *Control parameters controlled by the OLR procedures*; § 13.3 *Timing of changes in subcarrier configuration*; Figure 5-4; Figure 9-1; Figure 13-1; Table 9-3; Table 11-6; Figure 13-1; Table 12-57; Table 12-64; and/or Table 13-2.

**ITU-T G.9701** (12/2014 and 03/2019) at § 9.1 *Functional Reference Model*; § 9.3 *DTU encoder*; § 9.4 *Interleaver*; § 12.3.4.2.6 *R-PMS*; § 13.1.1 *Types of online reconfiguration*; § 13.2 *Eco-based procedures*; § 13.2.1 *Receiver initiated procedures*; § 13.2.1.1.1 *Parameters controlled by the SRA procedures*; § 13.2.1.1.1.1 *Parameters controlled by autonomous SRA in downstream*; § 13.2.1.1.5 *Timing and synchronization for SRA*; Annex R *Showtime reconfiguration (R.1 Scope; R.2.2 Modification of configuration parameters; Table R.1; R.3.3 Transition time period)*; Figure 5-1 *Reference model of FTTdp deployment*; Table 11-9; Table 12-49; and/or Table 13-2.

**IR-337 G.fast Certification Test Plan** (July 2017) at § 6.7 SRA Downshift Test; § 6.7.1 *Purpose*; § 6.7.2 *Certification Requirement*; § 6.7.3 *References*; § 6.7.7 *Expected Results*; § 6.8 *SRA Upshift Test*; § 6.8.1 *Purpose*; § 6.8.2 *Certification Requirement*; § 6.8.3 *References*; § 6.8.7 *Expected Results*;

(e) ethernet-based multi-pair bonding, including for example, features, functions, or operations relating to: **ITU-T G.998.2** (01/2005) at *Summary*; § 6 *Exceptions to IEEE 802.3ah-2004, clause 61*; § 6.2.2 *Exceptions to clause 61.2.2*; Figure 1; and/or Figure 2; IEEE Standard 802.3ah-2004 at § 61.2.2.5 *PME Aggregation restrictions*.

(f) ATM-based multi-pair bonding of G.992.3, G.992.5, G.993.2, and/or G.994.1, including for example, features, functions, or operations relating to:

**ITU-T G.992.3** (04/2009) at § 7.6.1 *Derived definitions*; § K.2.7 *Control Parameters*; and/or Table C.7-7; and/or Table 7-7.

**ITU-T G.992.5** (01/2005) at § 7.6.1 *Derived definitions*; § K.2.7 *Control Parameters*; and/or Table C.7-7; and/or Table 7-7.

**ITU-T G.993.2** (12/2011) at § 9.7 *Delay*; § 9.4 *Interleaving*; § L.2.7 *Control Parameters*; and/or Table 9-3 – *Summary of Interleaver Parameters*.

**ITU-T G.998.1** (01/2005) at *Summary*; § 6.1 *Sequencing payload traffic*; § 11.4.1 *Group Provisioning*; Figure 2; and/or Figure 4.

**ITU-T G.994.1** (06/2012) at Table 9.38.7.

(g) utilizing retransmission and a deinterleaving and/or interleaving function, including sharing memory, utilizing forward error correction, utilizing a retransmission buffer, utilizing a DMT symbol, and/or utilizing an ACK or NACK including for example, features, functions, or operations relating to:

**ITU-T G.998.4** (06/2010 and 04/2012 Amendment 2) at § 6 *Functional Reference Model*; § Annex C.2.1.3 *O-PMS*; § Annex D.1.1 *Memory (replaces clause C.1.1)*; § 8.1 *DTU framer*; § 8.1.5 *Sequence identifier (SID)*; § 8.2 *Retransmission multiplexer*, § 8.3 *Transmitter retransmission state machine*; § 8.4 *Retransmission Return Channel (RRC)*; § 8.4.2 *Extended Golay Code Description*; § 9.2 *FEC and interleaving*; § 12.3.5.2.2.3 *R-PMS*; § Annex C.2.2.2 *R-PMS*; Table 12-56 *Description of message O-PMS*; Table 12-57 *Latency path descriptor*; Table 12-64 *Description of message R-PMS*; Table C.4 *ITU-T G.998.4 parameter field for O-PMS*; Table C.6 *ITU-T G.998.4 parameter field for R-PMS*; Figure 6-1 *Reference model when retransmission is enable in both directions*; Figure 6-2 *Reference model in the forward direction when retransmission is enable in a single direction*; Figure 6-3 *Reference model in the return direction when retransmission is enabled in a single direction*; Figure 8-1 *Structure of DTU without CRC (Framing type 1) and synchronization with RS codewords*; Figure 8-5 *Structure and content of the RRC codeword*; and/or Figure 9-1 *Multiplexing of RRC and latency paths for ITU-T G.993.2*.

**ITU-T G.993.2** (12/2011) at § 1 *Scope*; § 3.12 *data frame*; § 3.13 *data symbol*; § 3.17 *DMT symbol*; § 8.2 *Retransmission multiplexer*; § 8.3 *Transmitter retransmission state machine*; § 8.4 *Retransmission Return Channel (RRC)*; § 10.1 *Definition of MTBE*; § 10.4.3 *Modulation by the inverse discrete Fourier transform (IDFT)*; § 12 *DTU counters*; § 12.3.5.2.1.3 *O-PMS*; Figure 5-4 *Generic application reference model for remote deployment with splitter*; Figure 8-5 *Structure and content of the RRC codeword*; and/or Figure 9-1 – *PMS-TC functional model applicable to single latency mode and dual latency mode*.

**ITU-T G.9701** (12/2014 and 03/2019) at § 3.2.8 *data transfer unit (DTU)*; § 3.2.11 *dummy DTU*; § 3.2.26 *RMC message*; § 3.2.27 *RMC symbol*; § 3.2.33 *symbol*; § 5.4 *FTU functional model*; § 8.2 *Generic DTU format*; § 8.2.1 *DTU header*; § 8.2.1.1 *Sequence identifier (SID) field*; § 8.2.1.3



*Auxiliary field; § 8.3 Packet-based TPS-TC (PTM-TC); § 8.3.1 PTM-TC DTU format; § 9.1 Functional Reference Model; § 9.3 DTU encoder; § 9.4 Interleaver; § 9.6.3 RMC encoder; § 9.6.4 RMC message fields; § 9.8 Retransmission function; § 9.8.3.2 Definition of signal-to-noise ration margin (SNRM); § 9.8.3.4 Definition of signal-to-noise ration margin for RMC (SNRM\_RMC); § 12.3.4.2.8 R-PMD; Figure 5-1 Reference model of FTTdp deployment; Figure 8-4 Generic DTU format; Figure 8-5 Bit mapping generic DTU header bytes; Figure 8-6 PTM-TC DTU payload format; Figure 9-1 Functional reference model of PMS-TC; Figure 9-2 Illustration of the block interleaver; Table 6-1 ITU-T G.9701 profiles; Table 9-4 RMC commands; Table 9-5 Downstream RMC command (sent by FTU-O only); Table 9-8 Upstream RMC command (sent by FTU-R only); and/or Table 13-5 Parameters controlling the RPA procedures;*

**IR-337 G.fast Certification Test Plan** (July 2017) at § 5.3.4 *Noise margin (SNRM) settings; § 5.3.7 Robust Management Channel (RMC) settings; Table 11 – Noise margin configuration; and/or Table 14 – RMC configuration.*

**ITU-T G.997.2** (05/2015) at § 7.1.3.1 *Downstream target noise margin (TARSNRMds); § 7.1.3.2 Upstream target noise margin (TARSNRMus); § 7.1.6.1 Downstream target noise margin for RMC (TRSNRM-RMCds); and/or § 7.1.6.2 Upstream target noise margin for RMC (TRSNRM-RMCus).*

(h) using different signal-to-noise ratio margins on different subchannels, including for example, features, functions, or operations relating to:

**ITU-T G.997.1** (6/2012) at § 7.3.1.10.9 *Downstream SNR margin offset of ROC (SNRMOFFSET-ROC-ds); § 7.3.1.3.2 Upstream target noise margin (TARSNRMus); § 7.3.1.10.10 Upstream SNR margin offset of ROC (SNRMOFFSET-ROC-us).*

**ITU-T G.993.2 (12/2011)** at § 9.5.3.1 *Robust overhead channel (ROC)*; § 9.5.3.2 *Multiplexing*; § 10.1 *PMD Functional Model*; § 10.3.1 *Tone ordering*; § 10.4.3 *Modulation by the inverse discrete Fourier transform (IDFT)*; § 11.4.1.1.6.1 *General definition of the signal-to-noise ratio margin*; § 11.4.1.1.6.4 *Signal-to-noise Ratio Margin for the ROC (SNRM-ROC)*; § 12.3.5.2.1 *VTU-O messages sent during the channel analysis and exchange phase*; § 12.3.5.2.1.1 *O-MSG 1*; § 12.3.7.1 *Channel Initialization Policies with ROC*; Table 12-49 *Description of message O-MSG 1*; Table 12-56 *Description of message O-PMS*; Table 12-57 *Latency path descriptor*; Table 12-59 *Description of message O-PMD*; Table 12-64; Table 12-65; Figure 5-4 *Generic application reference model for remote deployment with splitter*; and/or Figure 9-2 *PMS-TC functional model applicable to single latency with ROC mode*.

**ITU-T G.998.4 (06/2010)** at § 9 *PMS-TC function*; § 9.1 *PMS-TC functional model*; § 9.5.3.2 *Multiplexing*; § 10.1 *PMD Functional Model*; § 10.2 *General definition of the signal-to-noise ratio margin*; Table 12-59 *Description of message O-PMD*; Figure 6-1 *Reference model when transmission is enabled in both directions*; Figure 6-2 *Reference model in the forward direction when retransmission is enabled in a single direction*; Figure 9-1 *Multiplexing of RRC and latency paths for ITU-T G.993.2*; and/or Figure 9-6 *Multiplexing of two latency paths into data frames carried by DMT symbols*.

**ITU-T G.998.4 Amd. 2 (04/12)** at C.1.2 *Overhead channel*; and § 12.3.5.2.1.1 *O-MSG 1*; and/or § 12.3.7.1 *Channel initialization policies with ROC*.

**ITU-T G.9701 (12/2014 and 03/2019)** at § 3.2.33 *symbol*; § 9.8.3.2 *Definition of signal-to-noise ration margin (SNRM)*; § 9.8.3.4 *Definition of signal-to-noise ration margin for RMC (SNRM\_RMC)*; § 10.2.1.2 *Tone ordering*; § 10.4.3 *Inverse discrete Fourier transform (IDFT)*; § 12.3.4.2.1 *O-MSG 1*; § 12.3.4.2.7 *O-PMD*; § 12.3.4.2.8 *R-PMD*; Figure 5-1 *Reference model of*

*FTTdp deployment; Figure 9-3 Multiplexing of RMC frame and DTUs into data frames; Figure 10-3 Order of bit extraction from data frame; Table 12-38 O-MSG 1 message; Table 12-52 O-PMD message; Table 12-53 R-PMD message; Table 13-5 Parameters controlling the RPA procedures; IR-337 G.fast Certification Test Plan (July 2017) at § 5.3.4 Noise margin (SNRM) settings; § 5.3.7 Robust Management Channel (RMC) settings; § 6.11 RMC bit loading configuration test; § 6.11.1 Purpose; § 6.11.2 Certification Requirement; § 6.11.4 Test setup; § 6.11.7 Expected results; § 9.1 Functional reference model; Table 11 – Noise margin configuration; and/or Table 14 – RMC configuration.*

**ITU-T G.997.2** (05/2015) at § 7.1.3.1 *Downstream target noise margin (TARSNRMds)*; § 7.1.3.2 *Upstream target noise margin (TARSNRMus)*; § 7.1.3.1 *Downstream target noise margin (TARSNRMds)*; § 7.1.3.2 *Upstream target noise margin (TARSNRMus)*; § 7.1.6.1 *Downstream target noise margin for RMC (TRSNRM-RMCds)*; § 7.1.6.2 *Upstream target noise margin for RMC (TRSNRM-RMCus)*; § 7.1.6.5 *Downstream maximum bitloading for RMC (MAXBL-RMCds)*; § 7.1.6.6 *Upstream maximum bitloading for RMC (MAXBL-RMCus)*; § 9.8.3.2 *Definition of signal-to-noise ratio margin (SNRM)*; Table 12-52 *O-PMD message*; and/or Table 12-53 *R-PMD message*.

(i) utilizing a plurality of bonded transceivers (ATM or PTM bonding with ADSL2 and/or VDSL2) and at least one transceiver that is not bonded, including utilizing different data rates for the transceivers and connecting the transceivers to a multi-pair multiplexer.

#### **DOCUMENT CATEGORY 6:**

All Source Code for each Broadcom-CommScope chip/chipset and Broadcom-Nokia chip/chipset, including for each version or release of hardware, firmware, and software.

**DOCUMENT CATEGORY 7:**

All Documents identifying, describing, discussing, or relating to similarities or differences between versions or releases of Source Code responsive to Document Category 6.

**DOCUMENT CATEGORY 8:**

For each Broadcom-CommScope chip/chipset and Broadcom-Nokia chip/chipset, a representative set of schematics (e.g., connectivity and/or interface schematics), diagrams (e.g., functional and/or block diagrams), specifications, reference designs, flow charts, manuals, code descriptions, and descriptions of connectivity of electronic circuits (e.g., netlist).

**DOCUMENT CATEGORY 9:**

All Documents identifying, describing, discussing, or relating to testing or certification of any DSL feature or function of any Broadcom-CommScope chip/chipset, Broadcom-Nokia chip/chipset, and/or a product or reference design employing any Broadcom-CommScope chip/chipset or Broadcom-Nokia chip/chipset, including without limitation, all Documents relating to any certification as a Golden Node and/or to interoperability testing and/or acceptance testing.

**DOCUMENT CATEGORY 10:**

Documents sufficient to determine which Documents relating to:

- (a) any Broadcom-CommScope chip/chipset that CommScope received from Broadcom, or accessed or downloaded from Broadcom websites, databases, or customer portals, including without limitation server logs and download histories; and

(b) any Broadcom-Nokia chip/chipset that Nokia received from Broadcom, or accessed or downloaded from Broadcom websites, databases, or customer portals, including without limitation server logs and download histories.

**DOCUMENT CATEGORY 11:**

Documents identifying, describing, discussing, or relating to the pecuniary, cost-saving, performance, or operational benefits of DSL technologies on their own or in comparison to other broadband communication protocols, including without limitation ancillary benefits to Internet Service Providers (ISPs), networking equipment manufacturers and servicers, and/or end-users.

**DOCUMENT CATEGORY 12:**

All agreements with CommScope and Nokia relating to the sale or supply of DSL chips/chipsets, Broadcom-CommScope chips/chipsets and Broadcom-Nokia chip/chipset, technical support, software licenses, and/or access to Broadcom Documents and Nokia Documents.

**DOCUMENT CATEGORY 13:**

All agreements and communications relating to any actual and/or potential duty (or the lack of such duty) on Broadcom's part to defend, indemnify, and/or hold harmless CommScope and Nokia for patent infringement, including without limitation infringement of DSL standard-essential patents.

**DOCUMENT CATEGORY 14:**

All Documents identifying, describing, discussing, or relating to Broadcom's usual or customary practices and/or policies regarding licensing standard-essential patents when Broadcom manufactures a product marketed as practicing the standard.

**DOCUMENT CATEGORY 15:**

All license agreements that obligate or obligated Broadcom to pay a patent license fee or patent royalty for Broadcom's manufacture and/or sale of any Broadcom-CommScope chip/chipset and Broadcom-Nokia chip/chipset as well as Documents sufficient to show all payments of patent license fees or patent royalties actually made by or for Broadcom under such license agreements.

**DOCUMENT CATEGORY 16:**

All license agreements that obligate or obligated Broadcom to pay a license fee or royalty for DSL features or functionality of any Broadcom-CommScope chip/chipset and Broadcom-Nokia chip/chipset as well as Documents sufficient to show all payments of patent license fees or patent royalties actually made by or for Broadcom under such license agreements.

**DOCUMENT CATEGORY 17:**

All agreements to which Broadcom is a signatory or beneficiary that contains a patent license or royalty obligation for any DSL standard-essential patent as well as Documents sufficient to show all payments of patent license fees or patent royalties made to or for Broadcom under such agreements.

**DOCUMENT CATEGORY 18:**

Documents sufficient to identify patent license royalties paid by Broadcom for any Broadcom-CommScope chip/chipset and Broadcom-Nokia chip/chipset (in units and dollars; by product, and by quarter).

**DOCUMENT CATEGORY 19:**

All Communications between Broadcom and CommScope (including respective counsel for Broadcom and CommScope), and between Broadcom and Nokia and/or Alcatel-Lucent (including respective counsel for Broadcom, Nokia, and Alcatel-Lucent), concerning, relating to, or discussing TQ Delta, TQ Delta's patents, any patent office proceeding relating to any TQ Delta patent, or this litigation, including any joint defense or common interest agreement.

**DOCUMENT CATEGORY 20:**

All reports, studies, analyst reports, and/or presentations pertaining to ADSL, VDSL, VDSL, VDSL2, ADSL2, ADSL2+, G.inp, G.bond, G.fast or describing DSL devices, DSL service, DSL standards, and/or DSL chip/chipset market(s).

**DOCUMENT CATEGORY 21**

A copy of each directory, index, file control document, and/or version control document containing, listing, or referencing electronically stored information responsive to Document Categories 1-20, and documents sufficient to show the location(s), custodian(s), type(s), and

manner of organization of such responsive electronically stored information. The foregoing includes documents sufficient to show the hierarchical file structure for such files.



**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

**TQ DELTA, LLC,  
Plaintiff,**

V.

**COMMScope Holding Company, Inc., Commscope Inc., Arris International Limited, Arris Global Ltd., Arris US Holdings, Inc., Arris Solutions, Inc., Arris Technology, Inc., and Arris Enterprises, LLC,**

**NOKIA CORP., NOKIA SOLUTIONS  
AND NETWORKS OY, and NOKIA OF  
AMERICA CORP.**

**Defendants.**

## JURY TRIAL DEMANDED

**Civil Action 2:21-cv-310-JRG**  
**(Lead Case)**

**Civil Action No. 2:21-cv-309-JRG**  
**(Member Case)**

# PROTECTIVE ORDER

WHEREAS, Plaintiff TQ Delta, LLC and Defendants CommScope Holding Company, Inc., CommScope Inc., ARRIS US Holdings, Inc., ARRIS Solutions, Inc., ARRIS Technology, Inc., and ARRIS Enterprises, LLC and Defendants Nokia of America Corp., Nokia Corp. and Nokia Solutions and Networks Oy hereafter referred to as “the Parties,” believe that certain information that is or will be encompassed by discovery demands by the Parties involves the production or disclosure of trade secrets, confidential business information, or other proprietary information;

WHEREAS, the Parties seek a protective order limiting disclosure thereof in accordance with Federal Rule of Civil Procedure 26(c):

THEREFORE, it is hereby stipulated among the Parties and ORDERED that:

1. Each Party may designate as confidential for protection under this Order, in whole or in part, any document, information or material that constitutes or includes, in whole or in part, confidential or proprietary information or trade secrets of the Party or a Third Party to whom the Party reasonably believes it owes an obligation of confidentiality with respect to such document, information or material (“Protected Material”). Protected Material shall be designated by the Party producing it by affixing a legend or stamp on such document, information or material as follows: “CONFIDENTIAL.” The word “CONFIDENTIAL” shall be placed clearly on each page of the Protected Material (except deposition and hearing transcripts) for which such protection is sought. For deposition and hearing transcripts, the word “CONFIDENTIAL” shall be placed on the cover page of the transcript (if not already present on the cover page of the transcript when received from the court reporter) by each attorney receiving a copy of the transcript after that attorney receives notice of the designation of some or all of that transcript as “CONFIDENTIAL.”
2. Any document produced under Patent Rules 2-2, 3-2, and/or 3-4 before issuance of this Order with the designation “Confidential” or “Confidential - Outside Attorneys’ Eyes Only” shall receive the same treatment as if designated “RESTRICTED - ATTORNEYS’ EYES ONLY” under this Order, unless and until such document is redesignated to have a different classification under this Order.
3. With respect to documents, information or material designated “CONFIDENTIAL,” “RESTRICTED - ATTORNEYS’ EYES ONLY,” or “RESTRICTED CONFIDENTIAL

SOURCE CODE” (“DESIGNATED MATERIAL”),<sup>1</sup> subject to the provisions herein and unless otherwise stated, this Order governs, without limitation: (a) all documents, electronically stored information, and/or things as defined by the Federal Rules of Civil Procedure; (b) all pretrial, hearing or deposition testimony, or documents marked as exhibits or for identification in depositions and hearings; (c) pretrial pleadings, exhibits to pleadings and other court filings; (d) affidavits; and (e) stipulations. All copies, reproductions, extracts, digests and complete or partial summaries prepared from any DESIGNATED MATERIALS shall also be considered DESIGNATED MATERIAL and treated as such under this Order.

4. A designation of Protected Material (i.e., “CONFIDENTIAL,” “RESTRICTED - ATTORNEYS’ EYES ONLY,” or “RESTRICTED CONFIDENTIAL SOURCE CODE”) may be made at any time. Inadvertent or unintentional production of documents, information or material that has not been designated as DESIGNATED MATERIAL shall not be deemed a waiver in whole or in part of a claim for confidential treatment. Any party that inadvertently or unintentionally produces Protected Material without designating it as DESIGNATED MATERIAL may request destruction of that Protected Material by notifying the recipient(s), as soon as reasonably possible after the producing Party becomes aware of the inadvertent or unintentional disclosure, and providing replacement Protected Material that is properly designated. The recipient(s) shall then destroy all copies of the inadvertently or unintentionally produced Protected Materials and any documents, information or material

---

<sup>1</sup> The term DESIGNATED MATERIAL is used throughout this Protective Order to refer to the class of materials designated as “CONFIDENTIAL,” “RESTRICTED - ATTORNEYS’ EYES ONLY,” or “RESTRICTED CONFIDENTIAL SOURCE CODE,” both individually and collectively.

derived from or based thereon.

5. “CONFIDENTIAL” documents, information and material may be disclosed only to the following persons, except upon receipt of the prior written consent of the designating party, upon order of the Court, or as set forth in paragraph 12 herein:
  - (a) outside counsel of record in this Action for the Parties;
  - (b) employees of such counsel assigned to and reasonably necessary to assist such counsel in the litigation of this Action;
  - (c) in-house counsel for the Parties who either have responsibility for making decisions dealing directly with the litigation of this Action, or who are assisting outside counsel in the litigation of this Action; provided, however, that in-house counsel involved solely in licensing the patents-in-suit shall not be permitted to access information Protected Materials;
  - (d) up to and including three (3) designated representatives of each of the Parties to the extent reasonably necessary for the litigation of this Action, except that either party may in good faith request the other party’s consent to designate one or more additional representatives, the other party shall not unreasonably withhold such consent, and the requesting party may seek leave of Court to designate such additional representative(s) if the requesting party believes the other party has unreasonably withheld such consent;
  - (e) outside consultants or experts (*i.e.*, not existing employees or affiliates of a Party or an affiliate of a Party) retained for the purpose of this litigation, provided that: (1) such consultants or experts are not presently employed by the Parties hereto for purposes other than this Action; (2) before access is given, the consultant or expert has completed the Undertaking attached as Exhibit A hereto and the same is served upon the producing Party with a current curriculum vitae of the consultant or expert at least ten (10) days before access to the Protected Material is to be given to that consultant or Undertaking to object to and notify the receiving Party in writing that it objects to disclosure of Protected Material to the consultant or expert. The Parties agree to promptly confer and use good faith to resolve any such objection. If the Parties are unable to resolve any objection, the objecting Party may file a motion with the Court within fifteen (15) days of the notice, or within such other time as the Parties may agree, seeking a protective order with respect to the proposed disclosure. The objecting Party shall have the burden of proving the need for a protective order. No disclosure shall occur until all such objections are resolved by agreement or Court order;
  - (f) independent litigation support services, including persons working for or as court reporters, graphics or design services, jury or trial consulting services, and

photocopy, document imaging, and database services retained by counsel and reasonably necessary to assist counsel with the litigation of this Action; and

(g) the Court and its personnel.

6. A Party shall designate documents, information or material as “CONFIDENTIAL” only upon a good faith belief that the documents, information or material contains confidential or proprietary information or trade secrets of the Party or a Third Party to whom the Party reasonably believes it owes an obligation of confidentiality with respect to such documents, information or material.
7. Documents, information, or material produced pursuant to any discovery request in this Action, including but not limited to Protected Material designated as DESIGNATED MATERIAL, shall be used by the Parties only in the litigation of this Action and shall not be used for any other purpose. Any person or entity who obtains access to DESIGNATED MATERIAL or the contents thereof pursuant to this Order shall not make any copies, duplicates, extracts, summaries or descriptions of such DESIGNATED MATERIAL or any portion thereof except as may be reasonably necessary in the litigation of this Action. Any such copies, duplicates, extracts, summaries or descriptions shall be classified DESIGNATED MATERIALS and subject to all of the terms and conditions of this Order.
8. To the extent a producing Party believes that certain Protected Material qualifying to be designated CONFIDENTIAL is so sensitive that its dissemination deserves even further limitation, the producing Party may designate such Protected Material “RESTRICTED -- ATTORNEYS’ EYES ONLY,” or to the extent such Protected Material includes computer source code and/or live data (that is, data as it exists residing in a database or databases) (“Source Code Material”), the producing Party may designate such Protected Material as “RESTRICTED CONFIDENTIAL SOURCE CODE.”

9. For Protected Material designated RESTRICTED -- ATTORNEYS' EYES ONLY, access to, and disclosure of, such Protected Material shall be limited to individuals listed in paragraphs 5(a-c) and (e-g); provided, however, that access by in-house counsel pursuant to paragraph 5(c) be limited to in-house counsel who exercise no competitive decision-making authority on behalf of the client.
10. For Protected Material designated RESTRICTED CONFIDENTIAL SOURCE CODE, the following additional restrictions apply:
  - (a) Access to a Party's Source Code Material shall be provided only on "stand-alone" computer(s) (that is, the computer may not be linked to any network, including a local area network ("LAN"), an intranet or the Internet). The stand-alone computer(s) may be connected to (i) a printer, or (ii) a device capable of temporarily storing electronic copies solely for the limited purposes permitted pursuant to paragraphs 10 (h and k) below. Additionally, except as provided in paragraph 10(k) below, the stand-alone computer(s) may only be located at the offices of the producing Party's outside counsel and to the extent the producing Party's outside counsel have offices in a location convenient to opposing counsel and the receiving Party's experts, in those locations;
  - (b) The receiving Party shall make reasonable efforts to restrict its requests for such access to the stand-alone computer(s) to normal business hours, which for purposes of this paragraph shall be 8:00 a.m. through 6:00 p.m. However, upon reasonable notice from the receiving party, the producing Party shall make reasonable efforts to accommodate the receiving Party's request for access to the stand-alone computer(s) outside of normal business hours. The Parties agree to cooperate in good faith such that maintaining the producing Party's Source Code Material at the offices of its outside counsel shall not unreasonably hinder the receiving Party's ability to efficiently and effectively conduct the prosecution or defense of this Action;
  - (c) The producing Party shall provide the receiving Party with information explaining how to start, log on to, and operate the stand-alone computer(s) in order to access the produced Source Code Material on the stand-alone computer(s);
  - (d) The producing Party will produce Source Code Material in computer searchable format on the stand-alone computer(s) as described above;
  - (e) Access to Protected Material designated RESTRICTED CONFIDENTIAL - SOURCE CODE shall be limited to outside counsel and up to three (3) outside

consultants or experts<sup>2</sup> (*i.e.*, not existing employees or affiliates of a Party or an affiliate of a Party) retained for the purpose of this litigation and approved to access such Protected Materials pursuant to paragraph 5(e) above. A receiving Party may include excerpts of Source Code Material in a pleading, exhibit, expert report, discovery document, deposition transcript, other Court document, provided that the Source Code Documents are appropriately marked under this Order, restricted to those who are entitled to have access to them as specified herein, and, if filed with the Court, filed under seal in accordance with the Court's rules, procedures and orders;

- (f) To the extent portions of Source Code Material are quoted in a Source Code Document, either (1) the entire Source Code Document will be stamped and treated as RESTRICTED CONFIDENTIAL SOURCE CODE or (2) those pages containing quoted Source Code Material will be separately stamped and treated as RESTRICTED CONFIDENTIAL SOURCE CODE;
- (g) Except as set forth in paragraph 10(k) below, no electronic copies of Source Code Material shall be made without prior written consent of the producing Party, except as necessary to create documents which, pursuant to the Court's rules, procedures and order, must be filed or served electronically;
- (h) The receiving Party shall be permitted to make a reasonable number of printouts and photocopies of Source Code Material, all of which shall be designated and clearly labeled "RESTRICTED CONFIDENTIAL SOURCE CODE," and the receiving Party shall maintain a log of all such files that are printed or photocopied;
- (i) Should such printouts or photocopies be transferred back to electronic media, such media shall be labeled "RESTRICTED CONFIDENTIAL SOURCE CODE" and shall continue to be treated as such;
- (j) If the receiving Party's outside counsel, consultants, or experts obtain printouts or photocopies of Source Code Material, the receiving Party shall ensure that such outside counsel, consultants, or experts keep the printouts or photocopies in a secured locked area in the offices of such outside counsel, consultants, or expert. The receiving Party may also temporarily keep the printouts or photocopies at: (i) the Court for any proceedings(s) relating to the Source Code Material, for the dates associated with the proceeding(s); (ii) the sites where any deposition(s) relating to the Source Code Material are taken, for the dates associated with the deposition(s); and (iii) any intermediate location reasonably necessary to transport the printouts or photocopies (*e.g.*, a hotel prior to a Court proceeding or deposition); and

---

<sup>2</sup> For the purposes of this paragraph, an outside consultant or expert is defined to include the outside consultant's or expert's direct reports and other support personnel, such that the disclosure to a consultant or expert who employs others within his or her firm to help in his or her analysis shall count as a disclosure to a single consultant or expert.

- (k) A producing Party's Source Code Material may only be transported by the receiving Party at the direction of a person authorized under paragraph 10(e) above to another person authorized under paragraph 10(e) above, on paper or removable electronic media (e.g., a DVD, CD-ROM, or flash memory "stick") via hand carry, Federal Express or other similarly reliable courier. Source Code Material may not be transported or transmitted electronically over a network of any kind, including a LAN, an intranet, or the Internet. Source Code Material may only be transported electronically for the purpose of Court proceeding(s) or deposition(s) as set forth in paragraph 10(j) above and is at all times subject to the transport restrictions set forth herein. But, for those purposes only, the Source Code Materials may be loaded onto a stand-alone computer.
11. Any attorney representing a Party, whether in-house or outside counsel, and any person associated with a Party and permitted to receive the other Party's Protected Material that is designated RESTRICTED -- ATTORNEYS' EYES ONLY and/or RESTRICTED CONFIDENTIAL SOURCE CODE (collectively "HIGHLY SENSITIVE MATERIAL"), who obtains, receives, has access to, or otherwise learns, in whole or in part, the other Party's HIGHLY SENSITIVE MATERIAL under this Order shall not prepare, prosecute, supervise, or assist in the preparation or prosecution of any patent application pertaining to the field of the invention of the patents-in-suit on behalf of the receiving Party or its acquirer, successor, predecessor, or other affiliate during the pendency of this Action and for one year after its conclusion, including any appeals. To ensure compliance with the purpose of this provision, each Party shall create an "Ethical Wall" between those persons with access to HIGHLY SENSITIVE MATERIAL and any individuals who, on behalf of the Party or its acquirer, successor, predecessor, or other affiliate, prepare, prosecute, supervise or assist in the preparation or prosecution of any patent application pertaining to the field of invention of the patent-in-suit.
12. Nothing in this Order shall require production of documents, information or other material that a Party contends is protected from disclosure by the attorney-client privilege, the work



product doctrine, or other privilege, doctrine, or immunity. If documents, information or other material subject to a claim of attorney-client privilege, work product doctrine, or other privilege, doctrine, or immunity is inadvertently or unintentionally produced, such production shall in no way prejudice or otherwise constitute a waiver of, or estoppel as to, any such privilege, doctrine, or immunity. Any Party that inadvertently or unintentionally produces documents, information or other material it reasonably believes are protected under the attorney-client privilege, work product doctrine, or other privilege, doctrine, or immunity may obtain the return of such documents, information or other material by promptly notifying the recipient(s) and providing a privilege log for the inadvertently or unintentionally produced documents, information or other material. The recipient(s) shall gather and return all copies of such documents, information or other material to the producing Party, except for any pages containing privileged or otherwise protected markings by the recipient(s), which pages shall instead be destroyed and certified as such to the producing Party.

13. There shall be no disclosure of any DESIGNATED MATERIAL by any person authorized to have access thereto to any person who is not authorized for such access under this Order. The Parties are hereby ORDERED to safeguard all such documents, information and material to protect against disclosure to any unauthorized persons or entities.
14. Nothing contained herein shall be construed to prejudice any Party's right to use any DESIGNATED MATERIAL in taking testimony at any deposition or hearing provided that the DESIGNATED MATERIAL is only disclosed to a person(s) who is: (i) eligible to have access to the DESIGNATED MATERIAL by virtue of his or her employment with the designating party, (ii) identified in the DESIGNATED MATERIAL as an author, addressee,

or copy recipient of such information, (iii) although not identified as an author, addressee, or copy recipient of such DESIGNATED MATERIAL, has, in the ordinary course of business, seen such DESIGNATED MATERIAL, (iv) a current or former officer, director or employee of the producing Party or a current or former officer, director or employee of a company affiliated with the producing Party; (v) counsel for a Party, including outside counsel and in-house counsel (subject to paragraph 9 of this Order); (vi) an independent contractor, consultant, and/or expert retained for the purpose of this litigation; (vii) court reporters and videographers; (viii) the Court; or (ix) other persons entitled hereunder to access to DESIGNATED MATERIAL. DESIGNATED MATERIAL shall not be disclosed to any other persons unless prior authorization is obtained from counsel representing the producing Party or from the Court.

15. Parties may, at the deposition or hearing or within thirty (30) days after receipt of a deposition or hearing transcript, designate the deposition or hearing transcript or any portion thereof as “CONFIDENTIAL,” “RESTRICTED - ATTORNEY’ EYES ONLY,” or “RESTRICTED CONFIDENTIAL SOURCE CODE” pursuant to this Order. Access to the deposition or hearing transcript so designated shall be limited in accordance with the terms of this Order. Until expiration of the 30-day period, the entire deposition or hearing transcript shall be treated as confidential.
16. Any DESIGNATED MATERIAL that is filed with the Court shall be filed under seal and shall remain under seal until further order of the Court. The filing party shall be responsible for informing the Clerk of the Court that the filing should be sealed and for placing the legend “FILED UNDER SEAL PURSUANT TO PROTECTIVE ORDER” above the caption and conspicuously on each page of the filing. Exhibits to a filing shall conform to

the labeling requirements set forth in this Order. If a pretrial pleading filed with the Court, or an exhibit thereto, discloses or relies on confidential documents, information or material, such confidential portions shall be redacted to the extent necessary and the pleading or exhibit filed publicly with the Court.

17. The Order applies to pretrial discovery. Nothing in this Order shall be deemed to prevent the Parties from introducing any DESIGNATED MATERIAL into evidence at the trial of this Action, or from using any information contained in DESIGNATED MATERIAL at the trial of this Action, subject to any pretrial order issued by this Court.
18. A Party may request in writing to the other Party that the designation given to any DESIGNATED MATERIAL be modified or withdrawn. If the designating Party does not agree to redesignation within ten (10) days of receipt of the written request, the requesting Party may apply to the Court for relief. Upon any such application to the Court, the burden shall be on the designating Party to show why its classification is proper. Such application shall be treated procedurally as a motion to compel pursuant to Federal Rules of Civil Procedure 37, subject to the Rule's provisions relating to sanctions. In making such application, the requirements of the Federal Rules of Civil Procedure and the Local Rules of the Court shall be met. Pending the Court's determination of the application, the designation of the designating Party shall be maintained.
19. Each outside consultant or expert to whom DESIGNATED MATERIAL is disclosed in accordance with the terms of this Order shall be advised by counsel of the terms of this Order, shall be informed that he or she is subject to the terms and conditions of this Order, and shall sign an acknowledgment that he or she has received a copy of, has read, and has agreed to be bound by this Order. A copy of the acknowledgment form is attached as


Appendix A.

20. To the extent that any discovery is taken of persons who are not Parties to this Action (“Third Parties”) and in the event that such Third Parties contended the discovery sought involves trade secrets, confidential business information, or other proprietary information, then such Third Parties may agree to be bound by this Order.
21. To the extent that discovery or testimony is taken of Third Parties, the Third Parties may designate as “CONFIDENTIAL” or “RESTRICTED -- ATTORNEYS’ EYES ONLY” any documents, information or other material, in whole or in part, produced or given by such Third Parties. The Third Parties shall have ten (10) days after production of such documents, information or other materials to make such a designation. Until that time period lapses or until such a designation has been made, whichever occurs sooner, all documents, information or other material so produced or given shall be treated as “CONFIDENTIAL” in accordance with this Order.
22. Within thirty (30) days of final termination of this Action, including any appeals, all DESIGNATED MATERIAL, including all copies, duplicates, abstracts, indexes, summaries, descriptions, and excerpts or extracts thereof (excluding excerpts or extracts incorporated into any privileged memoranda of the Parties and materials which have been admitted into evidence in this Action), shall at the producing Party’s election either be returned to the producing Party or be destroyed. The receiving Party shall verify the return or destruction by affidavit furnished to the producing Party, upon the producing Party’s request.
23. The failure to designate documents, information or material in accordance with this Order and the failure to object to a designation at a given time shall not preclude the filing of a motion at a later date seeking to impose such designation or challenging the propriety

thereof. The entry of this Order and/or the production of documents, information and material hereunder shall in no way constitute a waiver of any objection to the furnishing thereof, all such objections being hereby preserved.

24. Any Party knowing or believing that any other party is in violation of or intends to violate this Order and has raised the question of violation or potential violation with the opposing party and has been unable to resolve the matter by agreement may move the Court for such relief as may be appropriate in the circumstances. Pending disposition of the motion by the Court, the Party alleged to be in violation of or intending to violate this Order shall discontinue the performance of and/or shall not undertake the further performance of any action alleged to constitute a violation of this Order.
25. Production of DESIGNATED MATERIAL by each of the Parties shall not be deemed a publication of the documents, information and material (or the contents thereof) produced so as to void or make voidable whatever claim the Parties may have as to the proprietary and confidential nature of the documents, information or other material or its contents.
26. Nothing in this Order shall be construed to effect an abrogation, waiver or limitation of any kind on the rights of each of the Parties to assert any applicable discovery or trial privilege.
27. Each of the Parties shall also retain the right to file a motion with the Court (a) to modify this Order to allow disclosure of DESIGNATED MATERIAL to additional persons or entities if reasonably necessary to prepare and present this Action and (b) to apply for additional protection of DESIGNATED MATERIAL.

**So ORDERED and SIGNED this 17th day of December, 2021.**

  
\_\_\_\_\_  
RODNEY GILSTRAP  
UNITED STATES DISTRICT JUDGE

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

<b>TQ DELTA, LLC,</b>	§	
<b>Plaintiff,</b>	§	<b>JURY TRIAL DEMANDED</b>
v.	§	
	§	
<b>COMMSCOPE HOLDING COMPANY,</b>	§	
<b>INC., COMMSCOPE INC., ARRIS</b>	§	
<b>INTERNATIONAL LIMITED, ARRIS</b>	§	
<b>GLOBAL LTD., ARRIS US HOLDINGS,</b>	§	<b>Civil Action 2:21-cv-310-JRG</b>
<b>INC., ARRIS SOLUTIONS, INC., ARRIS</b>	§	<b>(Lead Case)</b>
<b>TECHNOLOGY, INC., and ARRIS</b>	§	
<b>ENTERPRISES, LLC,</b>	§	
	§	
<b>NOKIA CORP., NOKIA SOLUTIONS</b>	§	
<b>AND NETWORKS OY, and NOKIA OF</b>	§	<b>Civil Action No. 2:21-cv-309-JRG</b>
<b>AMERICA CORP.</b>	§	<b>(Member Case)</b>
	§	
<b>Defendants.</b>	§	

**APPENDIX A  
UNDERTAKING OF EXPERTS OR CONSULTANTS REGARDING  
PROTECTIVE ORDER**

I, \_\_\_\_\_, declare that:

1. My address is \_\_\_\_\_.
- My current employer is \_\_\_\_\_.
- My current occupation is \_\_\_\_\_.
2. I have received a copy of the Protective Order in this action. I have carefully read and understand the provisions of the Protective Order.
3. I will comply with all of the provisions of the Protective Order. I will hold in confidence, will not disclose to anyone not qualified under the Protective Order, and will use only for purposes of this action any information designated as “CONFIDENTIAL,” “RESTRICTED -- ATTORNEYS’ EYES ONLY,” or “RESTRICTED CONFIDENTIAL

SOURCE CODE” that is disclosed to me.

4. Promptly upon termination of these actions, I will return all documents and things designated as “CONFIDENTIAL,” “RESTRICTED -- ATTORNEYS’ EYES ONLY,” or “RESTRICTED CONFIDENTIAL SOURCE CODE” that came into my possession, and all documents and things that I have prepared relating thereto, to the outside counsel for the party by whom I am employed.
5. I hereby submit to the jurisdiction of this Court for the purpose of enforcement of the Protective Order in this action.

I declare under penalty of perjury that the foregoing is true and correct.

Signature \_\_\_\_\_

Date \_\_\_\_\_